6560-50-P

#### ENVIRONMENTAL PROTECTION AGENCY

#### **40 CFR Part 52**

#### [EPA-R10-OAR-2010-0930, FRL-9675-7]

# Approval and Promulgation of Implementation Plans; State of Idaho; Regional Haze State Implementation Plan

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

SUMMARY: EPA is proposing to approve portions of a State Implementation Plan (SIP) revision submitted by the State of Idaho on October 25, 2010, as meeting the requirements of the Clean Air Act (CAA or the Act) and federal regional haze program requirements. In a previous action on June 22, 2011, EPA approved portions of the October 25, 2010, SIP submittal as meeting the requirements for interstate transport for visibility of the CAA and certain requirements of the regional haze program including the requirements for best available retrofit technology (BART). This Federal Register notice addresses the requirements of the Act and EPA's rules that require states to prevent any future and remedy any existing anthropogenic impairment of visibility in mandatory Class I areas caused by emissions of air pollutants from numerous sources located over a wide geographic area (also referred to as the "regional haze program"). This action proposes to approve the remaining regional haze SIP elements for which EPA previously took no action in the June 22, 2011, notice.

**DATES:** Written comments must be received at the address below on or before [insert date 30] days from the date of publication in the Federal Register].

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R10-OAR-2010-0930 by one of the following methods:

- www.regulations.gov. Follow the on-line instructions for submitting comments.
- E-mail: R10-Public\_Comments@epa.gov
- Mail: Steve Body, EPA Region 10, Suite 900, Office of Air, Waste and Toxics, 1200
   Sixth Avenue, Seattle, WA 98101
- Hand Delivery: EPA Region 10, 1200 Sixth Avenue, Suite 900, Seattle, WA 98101.

  Attention: Steve Body, Office of Air, Waste and Toxics, AWT-107. Such deliveries are only accepted during normal hours of operation, and special arrangements should be made for deliveries of boxed information.

Instructions: Direct your comments to Docket ID No. EPA-R10-OAR-2010-0930. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at <a href="https://www.regulations.gov">www.regulations.gov</a>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <a href="https://www.regulations.gov">www.regulations.gov</a> or e-mail. The <a href="https://www.regulations.gov">www.regulations.gov</a> Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA, without going through <a href="https://www.regulations.gov">www.regulations.gov</a>, your e-mail address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification,

EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

<u>Docket</u>: All documents in the docket are listed in the <u>www.regulations.gov</u> index. Although listed in the index, some information is not publicly available (e.g., CBI or other information whose disclosure is restricted by statute). Certain other material, such as copyrighted material, will be publicly available only in hard copy form. Publicly available docket materials are available either electronically at <u>www.regulations.gov</u> or in hard copy at the Office of Air, Waste and Toxics, EPA Region 10, 1200 Sixth Avenue, Seattle, WA 98101. EPA requests that if at all possible, you contact the individual listed below to view a hard copy of the docket.

**FOR FURTHER INFORMATION CONTACT:** Steve Body at telephone number (206) 553-0782, body.steve@epa.gov, or the above EPA, Region 10 address.

**SUPPLEMENTARY INFORMATION**: Throughout this document whenever "we," "us," or "our" is used, we mean the EPA. Information is organized as follows:

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# I. Background for EPA's Proposed Action

In the CAA Amendments of 1977, Congress established a program to protect and improve visibility in the national parks and wilderness areas. See CAA section 169A. Congress amended the visibility provisions in the CAA in 1990 to focus attention on the problem of regional haze. See CAA section 169B. EPA promulgated regulations in 1999 to implement sections 169A and 169B of the Act. These regulations require states to develop and implement plans to ensure reasonable progress toward improving visibility in mandatory Class I Federal areas<sup>1</sup> (Class I areas). 64 FR 35714 (July 1, 1999); see also 70 FR 39104 (July 6, 2005) and 71 FR 60612 (October 13, 2006).

On behalf of the State of Idaho, the Idaho Department of Environmental Quality submitted its Regional Haze State Implementation Plan (Regional Haze SIP submission or SIP

<sup>&</sup>lt;sup>1</sup>Areas designated as mandatory Class I Federal areas consist of national parks exceeding 6000 acres, wilderness areas and national memorial parks exceeding 5000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. 44 FR 69122 (November 30, 1979). The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. 42 U.S.C. 7472(a). Although states and tribes may designate as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to "mandatory Class I Federal areas." Each mandatory Class I Federal area is the responsibility of a "Federal Land Manager." 42 U.S.C. 7602(i). When we use the term "Class I area" in this action, we mean a "mandatory Class I Federal area."

submittal) to EPA on October 25, 2010. In a previous action EPA approved certain provisions in Idaho's Regional Haze SIP submission. 76 FR 36329. This previous action approved the provisions addressing Best Available Retrofit Technology (BART) (40 CFR 51.308(e), calculation of baseline and natural conditions (40 CFR 51.308(d)(2)) and state wide emission inventory of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any mandatory Class I area. In that same action, EPA also approved portions of the October 25, 2010 SIP submittal as meeting the requirements for interstate transport for visibility of CAA section 110(a)(2)(D)(i)(II).

In this action, EPA is proposing to approve the provisions of Idaho's Regional Haze SIP submission that address the remaining regional haze requirements for establishing Reasonable Progress Goals (RPGs) and the Long Term Strategy (LTS).

# A. Definition of Regional Haze

Regional haze is impairment of visual range or colorization caused by emission of air pollution produced by numerous sources and activities, located across a broad regional area. The sources include but are not limited to, major and minor stationary sources, mobile sources, and area sources including non-anthropogenic sources. These sources and activities may emit fine particles (PM2.5) (*e.g.*, sulfates, nitrates, organic carbon, elemental carbon, and soil dust), and their precursors (*e.g.*, sulfur dioxide (SO2), nitrogen oxides (NOx), and in some cases, ammonia (NH3) and volatile organic compounds (VOC)). Atmospheric fine particulate reduces clarity, color, and visual range of visual scenes. Visibility reducing fine particulate is primarily composed of sulfate, nitrate, organic carbon compounds, elemental carbon, and soil dust, and impairs visibility by scattering and absorbing light. Fine particulate can also cause serious health

effects and mortality in humans, and contributes to environmental effects such as acid deposition and eutrophication. See 64 FR at 35715.

Data from the existing visibility monitoring network, the "Interagency Monitoring of Protected Visual Environments" (IMPROVE) monitoring network, show that visibility impairment caused by air pollution occurs virtually all the time at most national parks and wilderness areas. The average visual range in many Class I areas in the Western United States is 100-150 kilometers, or about one-half to two-thirds the visual range that would exist without manmade air pollution.<sup>2</sup> Id. Visibility impairment also varies day-to-day and by season depending on variation in meteorology and emission rates.

# B. Regional Haze Rules and Regulations

In section 169A of the 1977 CAA Amendments, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the "prevention of any future, and the remedying of any existing, impairment of visibility in Class I areas which impairment results from manmade air pollution." CAA section 169A(a)(1). On December 2, 1980, EPA promulgated regulations to address visibility impairment in Class I areas that is "reasonably attributable" to a single source or small group of sources, i.e., "reasonably attributable visibility impairment" (RAVI). 45 FR 80084. These regulations represented the first phase in addressing visibility impairment. EPA deferred action on regional haze that emanates from a variety of sources until monitoring, modeling and scientific knowledge about the relationships between pollutants and visibility impairment were improved.

Congress added section 169B to the CAA in 1990 to address regional haze issues. EPA promulgated a rule to address regional haze on July 1, 1999 (64 FR 35713) (the regional haze

 $<sup>^{2}</sup>$  Id

rule or RHR). The RHR revised the existing visibility regulations to integrate into the regulation, provisions addressing regional haze impairment and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR 51.308 and 51.309, are included in EPA's visibility protection regulations at 40 CFR 51.300-309. Some of the main elements of the regional haze requirements are summarized in section III of this rulemaking. The requirement to submit a regional haze SIP applies to all 50 states, the District of Columbia and the Virgin Islands.<sup>3</sup> 40 CFR 51.308(b) requires states to submit the first implementation plan addressing regional haze visibility impairment no later than December 17, 2007.

# C. Roles of Agencies in Addressing Regional Haze

Successful implementation of the regional haze program will require long-term regional coordination among states, tribal governments and various Federal agencies. As noted above, pollution affecting the air quality in Class I areas can be transported over long distances, even hundreds of kilometers. Therefore, to effectively address the problem of visibility impairment in Class I areas, states need to develop strategies in coordination with one another, taking into account the effect of emissions from one jurisdiction on the air quality in another.

Because the pollutants that lead to regional haze impairment can originate from across state lines, even across international boundaries, EPA has encouraged the States and Tribes to address visibility impairment from a regional perspective. Five regional planning organizations <sup>4</sup> (RPOs) were created nationally to address regional haze and related issues. One of the main

<sup>&</sup>lt;sup>3</sup>Albuquerque/Bernalillo County in New Mexico must also submit a regional haze SIP to completely satisfy the requirements of section 110(a)(2)(D) of the CAA for the entire State of New Mexico under the New Mexico Air Quality Control Act (section 74-2-4).

<sup>&</sup>lt;sup>4</sup> See http://www.epa.gov/air/visibility/regional.html for description of the regional planning organizations.

objectives of the RPOs is to develop and analyze data and conduct pollutant transport modeling to assist the States or Tribes in developing their regional haze plans.

The Western Regional Air Partnership (WRAP)<sup>5</sup>, one of the five RPOs nationally, is a voluntary partnership of State, Tribal, Federal, and local air agencies dealing with air quality in the West. WRAP member States include: Alaska, Arizona, California, Colorado, Idaho, Montana, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. WRAP Tribal members include Campo Band of Kumeyaay Indians, Confederated Salish and Kootenai Tribes, Cortina Indian Rancheria, Hopi Tribe, Hualapai Nation of the Grand Canyon, Native Village of Shungnak, Nez Perce Tribe, Northern Cheyenne Tribe, Pueblo of Acoma, Pueblo of San Felipe, and Shoshone-Bannock Tribes of Fort Hall.

As a result of the regional planning efforts in the West, all states in the WRAP region contributed information to a Technical Support System (TSS) which provides an analysis of the causes of haze, and the levels of contribution from all sources within each state to the visibility degradation of each Class I area. The WRAP States consulted in the development of reasonable progress goals, using the products of this technical consultation process to co-develop their reasonable progress goals for the Western Class I areas. The modeling done by the WRAP relied on assumptions regarding emissions over the relevant planning period and embedded in these assumptions were anticipated emissions reductions in each of the States in the WRAP, including reductions from BART and other measures to be adopted as part of the State's long term strategy for addressing regional haze. The reasonable progress goals in the draft and final regional haze SIPs that have now been prepared by States in the West accordingly are based, in part, on the emissions reductions from nearby States that were agreed on through the WRAP process.

#### II. Requirements for Regional Haze SIPs

<sup>&</sup>lt;sup>5</sup> The WRAP website can be found at http://www.wrapair.org.

# A. The CAA and the Regional Haze Rule

Regional haze SIPs must assure reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas. Section 169A of the CAA and EPA's implementing regulations require states to establish long-term strategies for making reasonable progress toward meeting this goal. Implementation plans must also give specific attention to certain stationary sources that were in existence on August 7, 1977, but were not in operation before August 7, 1962, and require these sources, where appropriate, to install BART controls for the purpose of eliminating or reducing visibility impairment. The specific regional haze SIP requirements are discussed in further detail below.

# B. Determination of Baseline, Natural, and Current Visibility Conditions

The RHR establishes the deciview (dv) as the principal metric for measuring visibility. This visibility metric expresses uniform changes in haziness in terms of common increments across the entire range of visibility conditions, from pristine to extremely hazy conditions. Visibility is determined by measuring the visual range (or deciview), which is the greatest distance, in kilometers or miles, at which a dark object can be viewed against the sky. The deciview is a useful measure for tracking progress in improving visibility, because each deciview change is an equal incremental change in visibility perceived by the human eye. Most people can detect a change in visibility at one deciview.

The deciview is used in expressing reasonable progress goals (which are interim visibility goals towards meeting the national visibility goal), defining baseline, current, and natural conditions, and tracking changes in visibility. The regional haze SIPs must contain measures that ensure "reasonable progress" toward the national goal of preventing and remedying visibility impairment in Class I areas caused by manmade air pollution by reducing anthropogenic

<sup>&</sup>lt;sup>6</sup>The preamble to the RHR provides additional details about the deciview. 64 FR 35714, 35725 (July 1, 1999).

emissions that cause regional haze. The national goal is a return to natural conditions, i.e., manmade sources of air pollution would no longer impair visibility in Class I areas.

To track changes in visibility over time at each of the 156 Class I areas covered by the visibility program (40 CFR 81.401-437), and as part of the process for determining reasonable progress, states must calculate the degree of existing visibility impairment at each Class I area at the time of each regional haze SIP submittal and periodically review progress every five years midway through each 10-year implementation period. To do this, the RHR requires states to determine the degree of impairment (in deciviews) for the average of the 20% least impaired ("best") and 20% most impaired ("worst") visibility days over a specified time period at each of their Class I areas. In addition, states must also develop an estimate of natural visibility conditions for the purpose of comparing progress toward the national goal. Natural visibility is determined by estimating the natural concentrations of pollutants that cause visibility impairment and then calculating total light extinction based on those estimates. EPA has provided guidance to states regarding how to calculate baseline, natural and current visibility conditions in documents titled, EPA's Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule, September 2003, (EPA-454/B-03-005 located at http://www.epa.gov/ttncaaa1/t1/memoranda/rh envcurhr gd.pdf), (hereinafter referred to as "EPA's 2003 Natural Visibility Guidance"), and Guidance for Tracking Progress Under the Regional Haze Rule (EPA-454/B-03-004 September 2003 located at http://www.epa.gov/ttncaaa1/t1/memoranda/rh tpurhr gd.pdf)), (hereinafter referred to as "EPA's 2003 Tracking Progress Guidance").

For the first regional haze SIPs that were due by December 17, 2007, "baseline visibility conditions" were the starting points for assessing "current" visibility impairment. Baseline

visibility conditions represent the degree of visibility impairment for the 20% least impaired days and 20% most impaired days for each calendar year from 2000 to 2004. Using monitoring data for 2000 through 2004, states are required to calculate the average degree of visibility impairment for each Class I area, based on the average of annual values over the five-year period. The comparison of initial baseline visibility conditions to natural visibility conditions indicates the amount of improvement necessary to attain natural visibility, while the future comparison of baseline conditions to the then current conditions will indicate the amount of progress made. In general, the 2000 - 2004 baseline time period is considered the time from which improvement in visibility is measured.

# C. Consultation with States and Federal Land Managers

The RHR requires that states consult with Federal Land Managers (FLMs) before adopting and submitting their SIPs. 40 CFR 51.308(i). States must provide FLMs an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on the SIP. This consultation must include the opportunity for the FLMs to discuss their assessment of visibility impairment in any Class I area and to offer recommendations on the development of the reasonable progress goals and on the development and implementation of strategies to address visibility impairment. Further, a state must include in its SIP a description of how it addressed any comments provided by the FLMs. Finally, a SIP must provide procedures for continuing consultation between the state and FLMs regarding the state's visibility protection program, including development and review of SIP revisions, five-year progress reports, and the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas.

#### D. Best Available Retrofit Technology

Section 169A of the CAA directs states to evaluate the use of retrofit controls at certain larger, often uncontrolled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires States to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the natural visibility goal, including a requirement that certain categories of existing major stationary sources<sup>7</sup> built between 1962 and 1977, to procure, install, and operate the "Best Available Retrofit Technology" ("BART") as determined by the state. States are directed to conduct BART determinations for such sources that may be anticipated to cause or contribute to any visibility impairment in a Class I area. The regional haze SIP must include source-specific BART emission limits and compliance schedules for each source subject to BART. Once a State has made its BART determination, the BART controls must be installed and in operation as expeditiously as practicable, but no later than five years after the date EPA approves the regional haze SIP. See CAA section 169A(g)(4)); 40 CFR 51.308(e)(1)(iv).

EPA previously approved Idaho's BART determination for the sources subject to BART in its jurisdiction. See 76 FR 36329.<sup>8</sup> Please refer to that action for details of the BART requirements and EPA's rationale for approval of the BART provisions in the Idaho Regional Haze SIP submission.

## E. Determination of Reasonable Progress Goals

The vehicle for ensuring continuing progress towards achieving the natural visibility goal is the submission of a series of regional haze SIPs from the states that establish two reasonable progress goals (RPGs) (i.e., two distinct goals, one for the "best" and one for the "worst" days)

<sup>7</sup>The set of "major stationary sources" potentially subject to BART is listed in CAA section 169A(g)(7).

<sup>&</sup>lt;sup>8</sup> Upon EPA's final action, The Amalgamated Sugar Company (TASCO) filed a petition for review in the 9<sup>th</sup> Circuit Court of Appeals challenging EPA's approval of Idaho's BART determination for TASCO. See Amalgamated Sugar v. EPA, Ninth Circuit Petition No. 11-72445. The case is pending before the 9<sup>th</sup> Circuit.

for every Class I area for each (approximately) 10-year implementation period. The RHR does not mandate specific milestones or rates of progress, but instead calls for states to establish goals that provide for "reasonable progress" toward achieving natural (i.e., "background") visibility conditions. In setting RPGs, states must provide for an improvement in visibility for the most impaired days over the (approximately) 10-year period of the SIP, and ensure no degradation in visibility for the least impaired days over the same period.

States have significant discretion in establishing RPGs, but are required to consider the following factors established in section 169A of the CAA and in EPA's RHR at 40 CFR 51.308(d)(1)(i)(A): (1) the costs of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of compliance; and (4) the remaining useful life of any potentially affected sources. States must demonstrate in their SIPs how these factors are considered when selecting the RPGs for the best and worst days for each applicable Class I area. States have considerable flexibility in how they take these factors into consideration, as noted in EPA's Guidance for Setting Reasonable Progress Goals under the Regional Haze Program, July 1, 2007, Memorandum from William L. Wehrum, Acting Assistant Administrator for Air and Radiation, to EPA Regional Administrators, EPA Regions 1-10 (pp.4-2, 5-1) ("EPA's Reasonable Progress Guidance"). In setting the RPGs, states must also consider the rate of progress needed to reach natural visibility conditions by 2064 (referred to as the "uniform rate of progress" (URP) or the "glidepath") and the emission reduction measures needed to achieve that rate of progress over the 10-year period of the SIP. Uniform progress towards achievement of natural conditions by the year 2064 represents a rate of progress which states are to use for analytical comparison to the amount of progress they expect to achieve. In setting RPGs, each state with one or more Class I areas ("Class I state") must also consult with

potentially "contributing states," i.e., other nearby states with emission sources that may be affecting visibility impairment at the state's Class I areas. See 40 CFR 51.308(d)(1)(iv).

# F. Long Term Strategy

Consistent with the requirement in section 169A(b) of the CAA that states include in their regional haze SIP a 10 to 15 year strategy for making reasonable progress, 40 CFR 51.308(d)(3) of the RHR requires that states include a LTS in their regional haze SIPs. The LTS is the compilation of all control measures a state will use during the implementation period of the specific SIP submittal to meet applicable RPGs. The LTS must include "enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals" for all Class I areas within, or affected by emissions from, the state. See 40 CFR 51.308(d)(3).

When a state's emissions are reasonably anticipated to cause or contribute to visibility impairment in a Class I area located in another state, the RHR requires the impacted state to coordinate with the contributing states in order to develop coordinated emissions management strategies. See 40 CFR 51.308(d)(3)(i). In such cases, the contributing state must demonstrate that it has included, in its SIP, all measures necessary to obtain its share of the emissions reductions needed to meet the RPGs for the Class I area. The RPOs have provided forums for significant interstate consultation, but additional consultations between states may be required to sufficiently address interstate visibility issues. This is especially true where two states belong to different RPOs.

States should consider all types of anthropogenic sources of visibility impairment in developing their LTS, including stationary, minor, mobile, and area sources. At a minimum, states must describe how each of the following seven factors listed below are taken into account

in developing their LTS: (1) emissions reductions due to ongoing air pollution control programs, including measures to address RAVI; (2) measures to mitigate the impacts of construction activities; (3) emissions limitations and schedules for compliance to achieve the RPG; (4) source retirement and replacement schedules; (5) smoke management techniques for agricultural and forestry management purposes including plans as currently exist within the state for these purposes; (6) enforceability of emissions limitations and control measures; and (7) the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS. See 40 CFR 51.308(d)(3)(v).

# G. Coordinating Regional Haze and Reasonably Attributable Visibility Impairment

As part of the RHR, EPA revised 40 CFR 51.306(c) regarding the LTS for RAVI to require that the RAVI plan must provide for a periodic review and SIP revision not less frequently than every three years until the date of submission of the state's first plan addressing regional haze visibility impairment, which was due December 17, 2007, in accordance with 40 CFR 51.308(b) and (c). On or before this date, the state must revise its plan to provide for review and revision of a coordinated LTS for addressing RAVI and regional haze, and the state must submit the first such coordinated LTS with its first regional haze SIP. Future coordinated LTS's, and periodic progress reports evaluating progress towards RPGs, must be submitted consistent with the schedule for SIP submission and periodic progress reports set forth in 40 CFR 51.308(f) and 51.308(g), respectively. The periodic review of a state's LTS must report on both regional haze and RAVI impairment and must be submitted to EPA as a SIP revision.

## H. Monitoring Strategy and Other Implementation Plan Requirements

Section 51.308(d)(4) of the RHR includes the requirement for a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment that is

representative of all mandatory Class I Federal areas within the state. The strategy must be coordinated with the monitoring strategy required in section 51.305 for RAVI. Compliance with this requirement may be met through "participation" in the IMPROVE network, i.e., review and use of monitoring data from the network. The monitoring strategy is due with the first regional haze SIP, and it must be reviewed every five years. The monitoring strategy must also provide for additional monitoring sites if the IMPROVE network is not sufficient to determine whether RPGs will be met.

The SIP must also provide for the following:

- Procedures for using monitoring data and other information in a state with mandatory Class I areas to determine the contribution of emissions from within the state to regional haze visibility impairment at Class I areas both within and outside the state;
- Procedures for using monitoring data and other information in a state with no mandatory

  Class I areas to determine the contribution of emissions from within the state to regional haze

  visibility impairment at Class I areas in other states;
- Reporting of all visibility monitoring data to the Administrator at least annually for each Class I area in the state, and where possible, in electronic format;
- Developing a statewide inventory of emissions of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area. The inventory must include emissions for a baseline year, emissions for the most recent year for which data are available, and estimates of future projected emissions. A state must also make a commitment to update the inventory periodically; and
- Other elements, including reporting, recordkeeping, and other measures necessary to assess and report on visibility.

The RHR requires control strategies to cover an initial implementation period extending to the year 2018, with a comprehensive reassessment and revision of those strategies, as appropriate, every 10 years thereafter. Periodic SIP revisions must meet the core requirements of section 51.308(d) with the exception of BART. The requirement to evaluate sources for BART applies only to the first regional haze SIP. Facilities subject to BART must continue to comply with the BART provisions of section 51.308(e), as noted above. Periodic SIP revisions will assure that the statutory requirement of reasonable progress will continue to be met. Each state also is required to submit a report to EPA every five years that evaluates progress toward achieving the RPG for each Class I area within the state and outside the state if affected by emissions from within the state. 40 CFR 51.308(g). The first progress report is due five years from submittal of the initial regional haze SIP revision. At the same time a 5-year progress report is submitted, a state must determine the adequacy of its existing SIP to achieve the established goals for visibility improvement. See 40 CFR 51.308(h).

# III. EPA's Analysis of the Idaho Regional Haze SIP

#### A. Affected Class I Areas

There are five mandatory Class I areas, or portions of such areas, within Idaho. Craters of the Moon National Monument, Sawtooth Wilderness Area, and Selway-Bitterroot Wilderness Area lie completely within Idaho State borders. Idaho is responsible for developing reasonable progress goals for these Class I areas. Hells Canyon Wilderness Area is a shared Class I area with Oregon, and Yellowstone National Park is a shared Class I area with Wyoming. See 40 CFR 81.410. Through agreement with Idaho, Oregon and Wyoming respectively will address reasonable progress goals, monitoring, and other core requirements for these Class I areas. Idaho

consulted with Oregon and Wyoming to determine Idaho's contribution to regional haze in those Class I areas and to determine appropriate measures for Idaho's long-term strategy. See the Idaho Regional Haze SIP submittal, chapter 13, section 13.2; see, also the WRAP Technical Support Document, February 28, 2011<sup>9</sup> (WRAP TSD) supporting this action and 76 FR 36329.

The Idaho SIP submittal addresses the three Class I areas that are completely within the State border and, as appropriate, the Class I areas with shared jurisdiction with Oregon and Wyoming and Class I areas in neighboring states and the visibility impacts of Idaho sources on Class I areas in neighboring states.

# B. Baseline and Natural Conditions

EPA previously evaluated and approved Idaho's identification of baseline and natural conditions for Craters of the Moon National Monument, Sawtooth Wilderness Area, and Selway-Bitterroot Wilderness Area, and the statewide emissions inventory of pollutants that are from Idaho that impact nearby Class I areas. See 76 FR 1579, Jan. 11, 2011 and 76 FR 36329, June 22, 2011 (proposed and final rule respectively). However, that discussion is relevant when evaluating the States' Reasonable Progress Goals which we are proposing to approve today. Thus, the discussion below summarizes EPA's previous explanation of the baseline and natural conditions in these Class I areas.

Idaho established baseline and natural visibility conditions as well as the uniform rate of progress (URP) to achieve natural visibility conditions in 2064 for all three of the Class I areas within its borders. While Idaho is responsible for establishing baseline and natural conditions for these three areas, the SIP submittal also included these conditions for Hells Canyon Wilderness

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<sup>&</sup>lt;sup>9</sup> EPA evaluated the technical work products of the WRAP used by Idaho in support if this Regional Haze SIP submittal. The results of that evaluation are included in the document "WRAP Technical Support Document" or WRAP TSD.

Area and Yellowstone National Park, as determined by WRAP and established by Oregon and Wyoming.

Baseline visibility was calculated from monitoring data collected by IMPROVE monitors for the most-impaired (20 % worst) days and the least-impaired (20 % best) days. Idaho used the WRAP derived natural visibility conditions. In general, WRAP based their natural condition estimates on EPA guidance, *Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Program (EPA-45/B-03-0005 September 2003)* but incorporated refinements which EPA believes provides results more appropriate for western states than the general EPA default approach. See WRAP TSD section 2.E.

<u>Craters of the Moon National Monument:</u> An IMPROVE monitor is located in Craters of the Moon National Monument. Based on baseline 2000 to 2004 data, the average 20% worst days visibility is 14 dv and the average 20% best days visibility is 4.3 dv. Natural visibility for the average 20% worst days is 7.53 dv.

Sawtooth Wilderness Area: Sawtooth Wilderness Area has an IMPROVE monitor located within the Wilderness Area. Based on baseline 2000 to 2004 data, the average 20% worst days visibility is 13.78 dv and the average 20% best days visibility is 3.99 dv. Natural visibility for the average 20% worst days is 6.42 dv.

Selway-Bitterroot Wilderness Area: Selway-Bitterroot Wilderness Area visibility is represented by an IMPROVE monitor located 20 km east of the Wilderness Area in Sula, Montana. This site also represents visibility in the Anaconda-Pintler Wilderness Area in Montana. Based on baseline 2000 to 2004 data, the average 20% worst days visibility is 13.41 dv and the average 20% best days visibility is 2.58 dv for both areas. Natural visibility for the

Selway-Bitteroot and the Anaconda-Pintler Wilderness Areas average 20% worst days is 7.43 dv.

#### C. Idaho Emission Inventories

EPA previously evaluated and approved Idaho's emissions inventory of pollutants that impact the three Class I areas in Idaho, as well as the impacts of emissions from Idaho on nearby Class I areas in other states and the sources of visibility impairment in the Class I areas located in Idaho. See 76 FR 1579, and 76 FR 36329. As explained in more detail in the notices for that rulemaking, in general, smoke from wild and prescribed fire, as measured by organic and elemental carbon, dominates visibility impairment in Idaho Class I areas, with the exception of Craters of the Moon National Monument where ammonium nitrate dominates at 39%. Smoke is the second largest contributor to impairment at Craters of the Moon National Monument at 37%, followed by sulfate at 13%. Smoke represents 84% of impairment at the Sawtooth Wilderness Area, followed by sulfate at 7% and nitrate at 2%. Smoke represents 60% impairment at the Selway-Bitterroot Wilderness Area, followed by sulfate at 19% and nitrate at 7%. See Tables 7-2, 7-20, and 7-31 in the SIP submittal. Chapter 9 of the SIP submission demonstrates that generally half of the sulfate and 25% of the nitrate contributing to impairment in Idaho Class I areas originates from outside the United States.

#### D. Sources of Visibility Impairment in Idaho Class I Areas

Idaho used a two step process to identify the contribution of each source or source category to existing visibility impairment. First, ambient pollutant concentration by species (sulfate, nitrate, organic carbon, fine particulate, etc) was determined from the IMPROVE sampler representing each Class I area. These concentrations were then used to determine the extinction coefficient and distribute existing impairment among the measured pollutant species.

Extinction was then converted to deciview values. Second, the Comprehensive Air Quality Model with Extensions (CAMx) and Particulate Matter Source Apportionment Technology (PSAT) models were used to determine which sources and source categories contributed to the ambient concentration of each pollutant species. Thus, impairment was distributed by source and source category.

The WRAP and Western States selected CAMx in conjunction with PSAT first to determine source contribution to ambient sulfate and nitrate concentrations and then to decide which geographic source regions contribute to haze at specific Class I areas. Description of these tools and our evaluation of them are described in more detail in section 6 of the WRAP TSD

Figure 7-1 in the Idaho Regional Haze SIP submittal presents the light extinction for the base year at each Class I area by visibility impairing pollutant species for the average of the 20% worst days. In addition the SIP submission identifies in Figures 7.2 through Figure 7.52, light extinction by pollutant species for the average of the 20% worst and average of the 20% best days for each of the Class I areas.

To determine potential impacts of emission sources in Idaho on Class I areas in other states, Idaho used the WRAP analysis of interstate impacts. Ambient sulfate and nitrate concentrations for the 20% worst and best days for baseline (2002-2004) and 2018 at each western Class I area is distributed among all states in the WRAP. The SIP submittal provides an analysis of the Class I areas in nearby states. See chapter 9.3 of the Idaho Regional Haze SIP submission. The Class I areas are:

Shared Class I Areas with Oregon and Wyoming

- Hells Canyon Wilderness Area: Idaho contributes 9.6% of the sulfate, 35% of the nitrate, 63% of the organic and elemental carbon, 42% of the fine particulate and 44% of the coarse particulate in the Hells Canyon Wilderness Area.
- Yellowstone National Park: Idaho contributes 8% of the sulfate, 24% of the nitrate, 15% of the organic carbon, 17% of the elemental carbon, 28% of the fine and coarse particulate in Yellowstone National Park.

Class I Areas outside Idaho: See section 9.3 of the SIP submittal for a detailed presentation of the contribution of Idaho sources on Class I areas outside Idaho.

- Glacier National Park in Montana: Idaho is ranked 3<sup>rd</sup> behind Montana and Washington in contribution of visibility impairing pollutants on the 20% worst days.
- Cabinet Mountain Wilderness Area in Montana: Idaho is ranked 3<sup>rd</sup> behind Oregon and Washington in contribution to visibility impairing pollutants on the 20% worst days.
- Bob Marshall Wilderness Area in Montana: Idaho is ranked 3<sup>rd</sup> behind Montana and Washington in contribution to visibility impairing pollutants on the 20% worst days.
- Gates of the Mountain Wilderness in Montana: Idaho is 'ranked 3<sup>rd</sup>' behind Montana and Washington in contribution to visibility impairing pollutants on the 20% worst days.
- North Absaroka Wilderness in Wyoming: Idaho is ranked 2<sup>nd</sup> behind Wyoming in contribution to visibility impairing pollutants on the 20% worst days.
- Bridger Wilderness in Wyoming: Idaho is ranked 2<sup>nd</sup> behind Wyoming in contribution to visibility impairing pollutants on the 20% worst days.
- Eagle Cap Wilderness Area Oregon: Idaho is ranked 3<sup>rd</sup> behind Oregon and Washington in contribution to visibility impairing pollutant on the 20% worst days.

• Jarbidge Wilderness Area in Nevada: Idaho is ranked 1<sup>st</sup> in contribution of sulfate and nitrate to the Jarbidge Wilderness area.

# E. Best Available Retrofit Technology

EPA previously reviewed and approved Idaho's BART determinations for all sources subject to BART in Idaho. See 76 FR 36329. As explained in the Federal Register notice the State made BART determinations for the following sources:

- Amalgamated Sugar: Paul Facility
- Amalgamated Sugar: Twin Falls
- Amalgamated Sugar: Nampa
- NuWest/Agrium
- J.R. Simplot Don Plant
- Monsanto/P4 Production
- Potlatch Pulp and Paper

BART for all but two of the BART-eligible sources (Amalgamated Sugar Nampa and Monsanto/P4 Production) is existing control because they were determined to not cause or contribute to visibility impairment in any Class I area. At Amalgamated Sugar, Nampa, the Riley Boiler is the only emission unit at the facility that is subject to BART. BART for the Riley Boiler was determined to be Low NOx Burners with overfire air for NOx, wet flue gas desulfurization for SO2 and the existing baghouse for particulate matter.

BART for Monsanto/P4 Production SO2 emissions is the hydro-sonic wet scrubbers to remove sub-micron particles and lime-concentrated dual-alkai (LCDA) scrubbers on their calciner kiln which reduced emissions from 12,252 tons per year (tpy) in 2004 to a permitted potential to emit of 626 tpy.

# F. Determination of Reasonable Progress Goals

# 1. Idaho's Reasonable Progress Analysis

The RHR requires States to show "reasonable progress" toward natural visibility conditions over the time period of the SIP, with 2018 as the first milestone year. The RHR at 40 CFR 51.308(d)(1) also requires that the State establish a goal, expressed in deciviews (dv), for each Class I area within the State that provides for reasonable progress towards achieving natural visibility conditions by 2064. As such the State must establish a Reasonable Progress Goal (RPG) for each Class I areas that provides for visibility improvement for the most-impaired (20% worst) days and ensures no degradation in visibility for the least-impaired (20% best) days in 2018.

RPGs are estimates of the progress to be achieved by 2018 through implementation of the LTS which includes anticipated emission reductions from all State and Federal regulatory requirements implemented between the baseline and 2018, including but not limited to BART and any additional controls for non-BART sources or emission activities including any Federal requirements that reduce visibility impairing pollutants. As explained above, the rate needed to achieve natural conditions by 2064 is referred to as the uniform rate of progress or URP.

If the state establishes a reasonable progress goal that provides for a slower rate of improvement than the rate that would be needed to attain natural conditions by 2064, the State must demonstrate based on the factors in 40 CFR 51.308(d)(1)(i)(A), that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable; and the progress goal adopted by the State is reasonable. The state must provide to the public for review as part of its implementation plan an assessment of the number of years it would take to attain natural

conditions if visibility continues at the rate of progress selected by the state. 40 CFR 51.308(d)(B)(ii).

The primary tool relied upon by Idaho for determining regional haze improvements by 2018 and for establishing the RPGs, was the CMAQ modeling conducted by WRAP. The CMAQ model was used to estimate 2018 visibility conditions in Idaho and all Western Class I areas, based on application of the regional haze strategies included in this plan.

WRAP developed air quality modeling inputs including annual meteorology and emissions inventories for: (1) a 2002 actual emissions base case, (2) a planning case to represent the 2000-04 regional haze baseline period using average emissions for key emissions categories, and (3) a projected 2018 case to determine improvements achievable by 2018. EPA approves the use of the CMAQ model to determine future visibility conditions in Idaho Class I areas. A more detailed description of the CMAQ modeling performed by WRAP can be found in the WRAP TSD.

In setting the RPGs for its Class I areas, Idaho considered a number of factors including the statutory four factors: cost of compliance, time necessary for compliance, the non-air environmental and energy impacts, and remaining useful life of any potentially affected sources. 40 CFR 51.308(d)(1)(i)(A). Based on these four factors, Idaho considered whether it was reasonable to control anthropogenic sources of visibility impairing emissions under its regulatory jurisdiction. Idaho focused its evaluation of sources for the purpose of achieving further reasonable progress on SO2 and NOx because these pollutants have the greatest visibility impairing characteristics and because organic and elemental carbon primarily originates from wildfire. In consideration of the amount of SO2 and NOx emitted, Idaho identified the following source categories subject to the statutory four-factor analysis: (1) external combustion boilers;

(2) elemental phosphorus production; (3) sulfuric acid processing plants; (4) pulp and paper processing; (5) cement manufacturing; (6) sugar beet processing; and (7) natural gas compressing stations. Idaho's four-factor analysis of the significant stationary source categories is summarized below.

The External Combustion Boilers source category includes boilers used to generate steam or hot water in manufacturing, material processing, mining, refining, and/or electricity. SOx and NOx are the visibility impairing pollutants of concern for this category. Tables 11-2 and 11-3 in the Idaho SIP submittal show a total of 3,118 tpy of SO2 and 4,647 tpy of NOx in the emission inventory for this category. SIP submittal Table 11-7 presents a number of control options for each visibility impairing pollutant for different fuels. See section 11.4.1 of the SIP submittal for additional detail regarding the State's analysis of this source category.

Sulfuric Acid Contact Processing emits sulfur dioxide as the only visibility impairing pollutant of concern from this type of facility. Idaho SIP submittal Table 11-2 shows a total of 364 tpy of SO2 in the emission inventory for this category. SIP submittal Table 11-8 presents the cost for two control technologies: increased absorption efficiency to New Source Performance Standards and tail gas treatment. See SIP submittal section 11.4.3 for additional detail regarding the State's analysis of this source category.

Cement manufacturing emits NOx which is the only visibility impairing pollutant of concern. Idaho has only one cement plant, Ash Grove Cement in Inkom, Idaho. Both SO2 and NOx emissions from the rotary kiln have emission limits established in its PSD permit. Sulfur dioxide is limited to 76 tpy from Kiln #1 and 21 tpy from kiln #2. See Table 4-2 of the Permit to Operate issued December 23, 2010, by the Idaho Department of Environmental Quality (IDEQ). Table 11-3 Idaho SIP shows a total of 461 tpy of NOx in the emission inventory for this

category. Table 11-9 of the SIP submittal presents the estimated costs for compliance for the control options. See SIP Submittal section 11.4.4 for additional detail regarding the State's analysis of this source category.

Interstate Transport of Natural Gas (natural gas fueled internal combustion engines for compressing stations on the interstate natural gas pipeline) emits NOx which is the only visibility impairing pollutant of concern from the compressing stations. Table 11-3 in the Idaho SIP shows a total of 2,590 tpy of NOx in the emission inventory for this category. Table 11-10 of the SIP submittal presents the costs of control options for both reciprocating engines and gas turbines. See SIP submittal section 11.4.6 for additional detail regarding the State's analysis of this source category.

In spite of the relatively low cost effectiveness for controls in these source categories, Idaho concludes that additional control measures for these source categories are not reasonable at this time. Idaho recognized that according to the modeling, the Class I areas are not expected to achieve the URP for 2018. Nevertheless, Idaho also concludes that the goals established for each of Idaho's Class I areas for the first planning cycle of 2018 are reasonable. These conclusions are based upon the significant impact of wildfire on all of Idaho's Class I areas and the amount of sulfate and nitrate originating outside the United States. As discussed previously in this notice, wildfire significantly contributes to impairment in all three Class I areas. More specifically, anthropogenic and non-anthropogenic fire contributes between 37% and 84% to visibility impairment in the Class I areas in Idaho. Non-anthropogenic fire emissions are 85% and anthropogenic fire emissions are 15% of total fire emissions in Idaho. (Calculated from Table 8-4 of the SIP submission.) Idaho concluded that additional controls on individual sources, even if cost effective, will not alter the magnitude of the visibility impact attributable to

wildfire. Additionally, Idaho further refined its analysis and considered a URP individually for sulfate and nitrate impairment. This analysis found that due to the anticipated reductions of SO2 and NOx emissions in both Idaho and neighboring states which will result from required controls on point sources, the remaining sulfate and nitrate emissions are near to or exceed URP for those pollutants. Idaho concluded that additional controls on SO2 or NO2 sources are not helpful in achieving the URP.

Idaho also qualitatively considered two new developments in emission source projections since the WRAP modeling was completed that result in lower emissions than the emission estimates used in the WRAP modeling. When the WRAP modeling was performed, it was assumed that a new coal-fired power plant would be built and operating in Jerome, Idaho by 2018 and the expected emissions from this proposed plant were incorporated into the model projections. Subsequently, the Idaho Governor issued a moratorium on new coal-fired power plants. Thus the estimated emissions associated with the new facility will not occur. Also, requirements for new controls on marine vessels operating within 200 miles of the West Coast were not included in the projected improvements in visibility. Both of these actions are likely to result in lower emissions than were used in the model and achieve better visibility in future years than the model predicts.

#### 2. Reasonable Progress Goals and Demonstration of Reasonable Progress

After conducting the CMAQ modeling, Idaho established RPGs for each Class I area and, based on the RPG and linear progress to natural conditions, it determined the number of years need to achieve natural conditions. The results follow:

Craters of the Moon National Monument;

• Baseline 20% worst days: 14 dv

- 2018 RPG 20% worst days: 13.06 dv
- 2018 URP 20% worst days: 12.49 dv
- Baseline 20% best days: 04.31 dv
- 2018 RPG 20% best days: 03.89 dv
- Years needed to achieve natural conditions: 112 yrs
   Sawtooth Wilderness Area;
- Baseline 20% worst days: 13.78 dv
- 2018 RPG 20% worst days: 13.22 dv
- 2018 URP 20% worst days: 12.06 dv
- Baseline 20% best days: 03.99 dv
- 2018 RPG 20% best days: 03.78 dv
- Years needed to achieve natural conditions: 161 yrs
   Selway-Bitterroot Wilderness Area;
- Baseline 20% worst days: 13.41 dv
- 2018 RPG 20% worst days: 12.94 dv
- 2018 URP 20% worst days: 12.02 dv
- Baseline 20% best days: 02.58 dv
- 2018 RPG 20% best days: 02.48 dv
- Years needed to achieve natural conditions: 221

Idaho concludes, after considering the contribution of visibility impairment coming from natural sources rather than anthropogenic sources, the emissions reductions of SO2 and NOx that can be expected from anthropogenic sources, the four-factor analysis, and "on-the-books" controls and long term strategies, that no additional control is reasonable at this time and that

Idaho's visibility goals are reasonable. The focus should be on sources that could be controlled. Thus, in its evaluation of potential sources or source categories for reasonable progress the state primarily considered point sources. Idaho determined that the key pollutants contributing to visibility impairment are SO2, NOx and organic and elemental carbon. Idaho also only considered controls for SO2 and NOx emissions which are typically associated with anthropogenic sources. Idaho determined that the major source of organic and elemental carbon was natural fire and after reviewing the WRAP modeling results, Idaho found that particulate matter (PM) emissions from point sources only contribute a minimal amount to the visibility impairment in the Class I areas in Idaho. Idaho concluded that little gain would be achieved from further reduction in sulfur dioxide, organic carbon and nitrogen oxides from point sources in Idaho at this time.

## 3. EPA's Determination Whether the SIP Meets 40 CFR 51.308(d)

In a previous action, EPA approved Idaho's determination of baseline and natural visibility conditions in each Class I area in Idaho. See 78 FR 36329. The linear progress from baseline visibility to natural visibility in 2064 defines the URP. '2018 URP' is the rate of progress to be achieved by 2018 in order to stay on track to achieve natural conditions by 2064. EPA independently evaluated whether there are reasonable control measures available for sources located within Idaho's regulatory jurisdiction that would achieve further progress toward achieving the 2018 URP.

We began this analysis using a screening methodology called "Q/d" to determine which stationary (point) sources would be candidates for controls under reasonable progress. The value Q/d is the ratio of the mathematical sum of actual SO2, NOX and PM emissions in tons per year, denoted as "Q" divided by the distance (in kilometers, denoted as "d") of the point source to

the nearest Class I area. A high Q/d would indicate the likelihood of the source causing or contributing to impairment in that Class I area.

To determine the Q/d value that would provide assurance that a source would, or would not cause or contribute to impairment in any Class I area, we considered the modeled visibility impacts from the CALPUFF modeling used to determine the BART eligible sources subject to BART in EPA Region 10 and the distance of the source to the nearest Class I area. There were 19 BART eligible sources used in this analysis. See memorandum to the files from Keith Rose, EPA Region 10, dated March 21, 2012. All sources with a Q/d ratio of less than 26.1 had visibility impacts of less than 0.5 dv. The resultant average of the range is about 0.3 dv, which is a more conservative reasonable progress threshold than the 0.5 dv that was used in determining which sources would be subject-to-BART under the federal BART regulations. Since the threshold is more conservative than the subject-to-BART threshold, we believe that a Q/d value of 20 is reasonable for determining which sources the State should consider for the reasonable progress analysis.

The evaluation of potential RP sources involved all Idaho's stationary sources with actual SO2, NOX, or PM10 emissions greater than 40 tpy. We identified 24 sources (both BART eligible and non-BART eligible) as exceeding the 40 tpy threshold. Of the 24 sources, 17 are not BART eligible and all had Q/d ratios of less than 20. The source with the highest ratio had a Q/d value of 17.

EPA does not believe these 17 non-BART sources would cause or contribute to impairment in any Class I area. Therefore, EPA does not believe that additional analysis of the 17 non-BART sources would result in an outcome different from Idaho's conclusion that additional control of these non-BART sources is not reasonable at this time. Thus, EPA agrees

with Idaho's conclusion that additional controls of non-BART point sources for reasonable progress purposes are not reasonable at this time, because even though there are cost effective controls identified, visibility improvement is anticipated to be relatively small. This includes those point sources in the four categories that Idaho identified above for the four-factor analysis: (1) external combustion boilers; (2) sulfuric acid contact processing; (3) cement manufacturing; and (4) natural gas compressing stations.

It should be noted that while elemental phosphorus production was identified by Idaho as a potential source category for the reasonable progress analysis, the only source is Monsanto/P4, a source subject to BART, for which a control technology evaluation was conducted and a BART determination made. Implementation of BART for Monsanto/P4 will result in an approximate 9,000 tpy reduction in SO2, roughly over half the total statewide point source SO2 emissions in 2002. The BART evaluation for NOx determined there are no feasible NOx controls for this process.

Idaho identified sugar beet processing as a potential source for further four-factor analysis. The boilers used in sugar beet processing are addressed in the evaluation of external boilers. Likewise, Idaho identified pulp and paper as a potential source for further four-factor analysis. The only pulp mill in Idaho is the Potlatch Pulp & Paper Mill located in Lewiston, Idaho. The Potlatch facility is a BART-eligible source and was addressed in our previous Federal Register action dated June 22, 2011 (76 FR 36329).

EPA also considered control measures for anthropogenic fire; prescribed forest fire and agricultural fire. Idaho operates a robust enhanced smoke management program for prescribed forest fire and agricultural burning. The agricultural smoke management program was

previously approved by EPA. See 73 FR 44915. There are no other source categories that appear to emit visibility impairing pollutants sufficient to warrant consideration for additional control.

The Idaho SIP results in improvement in visibility on the 20% worst days and no degradation in visibility on the 20% best days, however the URP for 2018 is not expected to be achieved in any Class I area in Idaho. Nevertheless, as explained below, EPA proposes to approve the State's determination that it is not reasonable to achieve the UPR in 2018 and that these RPGs for the Class I areas in Idaho presented in the SIP submittal are reasonable.

- a. Findings from the statutory four-factor analysis. As discussed above, based on the general level of review for the major source categories, Idaho determined it was not reasonable to control additional source categories at this time.
- b. Evidence that natural sources affect the ability to achieve the 2018 URP goal. Idaho's analysis in the SIP for natural emission sources supports the finding that the contributions of natural sources, such as natural wildfire and windblown dust, and the pollutants associated with these sources (organic carbon, elemental carbon, fine particulate, and coarse particulate) are the primary reason for not achieving the 2018 URP for Idaho Class I areas. For example, the state found that 82% of the organic carbon emissions and 72% of the elemental carbon emissions were from natural fire and that natural fire and windblown dust together contribute over 40% and 60% of PM2.5 and PM emissions. See Table 11-1 of the SIP submittal.
- c Sources outside the modeling domain. Sources of SO2 and NOx emissions outside the modeling domain contribute from 45 to 51% of the SO2 emissions, and from 25 to 37% of the NOx emissions that impact visibility in Class I areas in Idaho. See Table 12-2. These sources are not under the jurisdiction of Idaho nor surrounding States, and therefore will not be significantly controlled by 2018.

d. Not reasonable to meet URP. 40 CFR 51.308(d)(1)(ii) provides that: If the state establishes a RPG that provides for a slower rate of improvement in visibility than the rate that would be needed to attain natural conditions by 2064, the state must demonstrate based on the four-factors that the rate of progress for the implementation plan to attain natural conditions by 2064 is not reasonable and that the progress goal adopted by the state is reasonable. This demonstration is twofold. Idaho demonstrated that achieving the URP is not reasonable due to the overwhelming visibility impacts of wildfire and emissions from sources outside the modeling domain, both uncontrollable source categories. Idaho's analysis also uses an approach based on looking at each pollutant species, showing that URP is achieved or almost achieved for SO2 and NOx. This approach goes beyond what was contemplated by the RHR and but even without using the pollutant species approach, the State's RPGs are reasonable because of the source category analysis and the contribution from sources outside the modeling domain and from nonanthropogenic sources. Although Idaho is anticipated to achieve reasonable and significant reductions of NOx and SO2 during the first planning period, reaching the URP is not reasonable since the visibility benefits from potential SO2 and NOx controls on other source categories is minimal, and the majority of visibility impairment is due to uncontrollable emissions.

As explained in the EPA's RPG Guidance, the 2018 URP estimate is not a presumptive target and the State's RPGs may be lesser, greater or equivalent to the glide path. The glide path to 2064 represents a rate of progress which states must use for analytical comparison to the amount of progress they expect to achieve. EPA believes the RPGs established by Idaho for the Class I areas in Idaho, although not achieving the URP, are reasonable because of the significant visibility improvement expected from BART controls for SO2 and NOx. Idaho determined that

other measures needed to reach the URP are not reasonable at this time because of the overwhelming influence of natural fire to visibility impairment and the fact that additional control measures on sources of sulfate and nitrate are not estimated to contribute substantial visibility improvement by the end of the first planning period. Consequently, we propose to find that the State has demonstrated that its 2018 RPGs are reasonable and consistent with 40 CFR 51.308(d)(1) and 51.308(d)(1)(ii).

# G. Long Term Strategy

The Long Term Strategy required by 40 CFR 51.308(d)(3) is a compilation of all existing and anticipated new air pollution control measures (both those identified in this plan as well as measures resulting from other air pollution requirements.) The LTS must include "enforceable emission limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals" for all Class I areas within or effected by emissions from the State.

40 CFR 51.308(d)(3). In developing a LTS, Idaho identified existing programs and rules, additional new controls that may be needed for other CAA requirements, and additional measures which may be required to achieve reasonable progress in Class I areas in Idaho.

Idaho adequately addressed the RHR requirements in developing its LTS. The LTS provides sufficient documentation to ensure that Idaho will meet its emission reduction obligations for all Class I areas it affects in the first planning period. Idaho relied on monitoring, emission inventories and modeling information from the WRAP as the technical basis for its LTS. Coordination and consultation occurred with other states through the WRAP, in which all western states participated in developing the technical analysis upon which their SIPs are based. The state's analysis included identifying all anthropogenic sources of visibility impairment including major and minor stationary sources, mobile sources, and area sources. The anticipated

net effect on visibility over the first planning period due to changes in point, area and mobile source emissions is an improvement in visibility in all Class I areas in Idaho.

Idaho has a number of ongoing programs and regulations that directly protect visibility or provide for improved visibility by generally reducing emissions:

• Prevention of Significant Deterioration/New Source Review Regulations:

Two primary regulatory programs for addressing visibility impairment from industrial sources are the BART and Prevention of Significant Deterioration/New Source Review (PSD/NSR) rules. The PSD/NSR rules protect visibility in Class I areas from emissions from new industrial sources and major modifications to existing sources. Idaho's regulations (IDAPA58.01.01.200 through 228) and SIP require visibility impact assessment and mitigation associated with emissions from new and modified major stationary sources through protection of air quality related values (AQRVs). AQRVs are scenic and environmentally related resources that may be adversely affected by a change in air quality, including visibility, odor, noise, vegetation, and soils. These requirements were approved by EPA in 1983. Idaho's continued implementation of PSD/NSR requirements with FLM involvement for Class I area impact review will assist in maintaining the least impaired days from further degradation and assure that no Class I area experiences degradation in visibility resulting from expansion or growth of stationary sources in the state.

## • Regional Haze BART Controls:

The RHR includes the requirements for states to implement BART for eligible sources within the State that may reasonably cause or contribute to any impairment of visibility in any mandatory Class I area. 40 CFR 51.308(e). The installation of BART emission limits is an

integral part of the state's LTS. Idaho regulations in IDAPA 58.01.01 contain the requirements for BART under the regional haze rule including measures necessary to address RAVI. Idaho has completed analysis of the identified BART-eligible sources in Idaho and has determined BART emission limits for all BART-subject sources. Each source subject to BART is required to install and operate BART five years after the EPA approval of the implementation plan. Once controls are implemented, facilities subject to BART must ensure that control equipment is properly operated and maintained. EPA previously approved the BART portions of the Idaho Regional Haze plan. 76 FR 36329.

• Local, State and Federal Mobile Source Control Programs:

Estimated mobile source emissions show decreases in NOx, SO2, and VOCs in Idaho during the period 2002-2018. These declines in emissions are due to numerous rules already in place, most of which are federal regulations. The Federal Motor Vehicle Control Program (FMVCP) is the federal certification program that requires all new cars sold in 49 states to meet specific emission standards. As part of the FMVCP, all new cars must meet their applicable emission standards on a standard test cycle called the Federal Test Procedure (FTP). These standards vary according to vehicle age, with the newer vehicles required to be considerably cleaner than older models. The result of this decline over time in allowable emissions from newly manufactured vehicles has been a drop in overall emissions from the vehicle fleet, as older, dirtier vehicles are replaced with newer, cleaner vehicles.

EPA's Tier 2 emission standards for passenger cars, light trucks and larger passenger vehicles are focused on reducing emissions most responsible for ozone and particulate matter.

The control equipment introduced to meet these standards will result in reductions in visibility impairing pollutants. Various federal rules establishing emission standards and fuel requirements

for diesel on-road and non-road equipment are expected to significantly reduce emissions of particulate matter, nitrogen oxides, and sulfur oxides from emission sources over the first planning period.

## Implementation of Programs to Meet PM10 NAAQS

Northern Ada County (Boise) and Portneuf Valley (Pocatello) are PM10 maintenance areas. See 68 FR 61106 and 71 FR 39574. These areas previously exceeded the PM10 NAAQS primarily due to residential wood combustion and road dust. To control the PM10 emissions and bring the area into attainment, Idaho put in place strict controls that regulate wood burning and control road dust in these communities.

# Measures to Mitigate Impacts of Construction Activities

In developing its LTS, Idaho considered the impact of construction activities on visibility in the Class I areas in Idaho. State regulations IDAPA 58.01.01.651 and 652 require that entities that cause or permit bulk materials to be handled, transported, or stored or who engage in industrial activities or construction projects shall take reasonable precautions to prevent particulate matter from being airborne. In determining 'reasonable precautions' the rule specifically identifies activities and proximity to any Class I area. Types of precautions include: use of water or chemicals, application of dust suppressants, use of control equipment, covering truck loads, paving of roads, and prompt removal of material.

## • Emission Limitations and Schedules for Compliance

Emission limits and compliance schedules for stationary sources are specified under Idaho and federal regulations in accordance with the Act. Additionally as discussed above, the BART provisions previously approved by EPA establish federally enforceable emission limitations and compliance schedule for BART sources. Idaho anticipates that future SIP updates

may identify additional emission controls that could be implemented in the future and commits to include limits and compliance schedules as appropriate in future Regional Haze plan updates.

• Source Retirement and Replacement Schedules

Idaho's continued implementation of NSR and PSD requirements, with the FLMs Review of impacts to Class I areas, will assure that there is no degradation of visibility in Idaho Class I areas on the least impaired days from expansion or growth of stationary sources in the State. Idaho will track source retirement and replacement and include known retirement schedules in periodic revisions to its Regional Haze SIP.

Smoke Management Techniques for Agricultural and Forestry Burning

Smoke from wildland and prescribed fire is a major contributor to visibility impairment in Idaho's Class I Areas. Idaho's implementation of effective smoke management techniques through regulation and an enhanced smoke management plan will mitigate impacts of planned burning on visibility in the Class I areas. For example, Idaho regulates agricultural burning through its crop residue burning regulations. See IDAPA 58.01.01.617-623. In accordance with these regulations, Idaho requires permits and daily burn approval for crop residue burning. Idaho regulates prescribed fire through IDAPA 58.01.01.614 and works cooperatively with the Montana/Idaho Airshed Group to address air quality impacts from wildland fire. The Montana/Idaho Airshed Group is composed of Federal, State, Tribal and private land managers dedicated to the preservation of air quality in Idaho and Montana. The Airshed Group manages prescribed fire throughout Idaho and Montana by daily authorization of individual burns.

• Enforceability of Emission Limitations and Control Measures

The BART emission limits and control measures are enforceable as a matter of state law by virtue of IDAPA 58.01.01.655 through 668, and are federally enforceable when approved as

part of its SIP. As previously mentioned, EPA approved Idaho's BART emission limits and controls on June 22, 2011. 76 FR 36329.

Idaho projected the emissions inventory changes to the point, area and mobile sources by 2018. The changes are predicted based on the WRAP's most recent emissions inventory and include the BART and LST components known at the time of the inventory development.

Amore detailed discussion of the reductions may be found in section 8 of the SIP Submittal.

H. Monitoring Strategy and Other Implementation Plan Requirements

The primary monitoring network for regional haze in Idaho is the IMPROVE network. As discussed above, there are currently IMPROVE sites at Craters of the Moon National Monument, Sawtooth Wilderness Area and Selway-Bitterroot Wilderness Area. IMPROVE monitoring data from 2000-2004 serves as the baseline for the regional haze program, and is relied upon in the Idaho Regional Haze submittal. Idaho commits to rely on the IMPROVE network for complying with the regional haze monitoring requirement in EPA's RHR for the current and future regional haze implementation periods. See section 4.4 of the SIP submittal. Data produced by the IMPROVE monitoring network will be used for preparing the five-year progress reports and the 10-year SIP revisions, each of which relies on analysis of the preceding five years of data.

### I. Consultation with States and Federal Land Managers

Through the WRAP, member states and Tribes worked extensively with the FLMs from the U.S. Departments of the Interior and Agriculture to develop technical analyses that support the regional haze SIPs for the WRAP states. The proposed Regional Haze plan for Idaho was provided to the FLM for comment between June 3, 2010 and August 5, 2010. See section 13.1 of the SIP submittal. Idaho also consulted with the States of Washington, Oregon, Nevada,

Wyoming and Montana. Idaho also commits to continued consultation with the FLMs and the other states as part of the continued implementation of the plan and for future progress reports and revisions. This continuing consultation process will provide the opportunity for on-going opportunities to address a host of items including, for example, the implementation of emission control programs, changes to the monitoring strategy or monitoring locations, status of state actions to meet commitments for future assessments or rulemaking, and work on the five-year reviews and ten-year revisions. Additionally, Idaho consulted with the tribes during development of their plan through the WRAP activities and direct outreach to the tribes. Accordingly, Idaho adequately addressed the consultation requirements in the RHR and appropriately documented its consultation with FLMs and other states.

# J. Periodic SIP Revisions and Five-year Progress Reports

Section 51.308(f) of the RHR requires that the regional haze plans be revised and submitted to EPA by July 31, 2018 and every 10 years thereafter. 40 CFR 51.308(g) requires the state to submit a progress report to EPA every five years evaluating progress towards the reasonable progress goals for each Class I area in the State and each Class I area located outside the State which may be affected by emissions from within the State. Idaho has committed to evaluate and reassess its Regional Haze plan and to provide a Regional Haze SIP revision by July 31, 2018 for the next 10 year planning cycle. See section 13.5 of the SIP submission. Idaho has also committed to submitting the five- year review and report on the Regional Haze plan. See section 13.1 of the SIP submittal.

#### IV. What Action is EPA Proposing?

On June 22, 2011, EPA approved portions of the Idaho Regional Haze Plan submitted October 25, 2011, including Idaho's emission inventory, determination of baseline and natural

condition and the BART controls and emission limits. Today, for the reasons explained above, EPA is proposing to approve the remaining parts of the Idaho Regional Haze submittal as meeting the requirements set forth in section 169A and 169B of the Act and in 40 CFR 51.300-308 regarding regional haze.

# V. Scope of Action

Idaho has not demonstrated authority to implement and enforce IDAPA chapter 58 within "Indian Country" as defined in 18 U.S.C. 1151. 10 Therefore, EPA proposes that this SIP approval not extend to "Indian Country" in Idaho. See CAA sections 110(a)(2)(A) (SIP shall include enforceable emission limits), 110(a)(2)(E)(i) (State must have adequate authority under State law to carry out SIP), and 172(c)(6) (nonattainment SIPs shall include enforceable emission limits). This is consistent with EPA's previous approval of Idaho's PSD program, in which EPA specifically disapproved the program for sources within Indian Reservations in Idaho because the State had not shown it had authority to regulate such sources. See 40 CFR 52.683(b). It is also consistent with EPA's approval of Idaho's title V air operating permits program. See 61 FR 64622, 64623 (December 6, 1996) (interim approval does not extend to Indian Country); 66 FR 50574, 50575 (October 4, 2001) (full approval does not extend to Indian Country).

<sup>&</sup>lt;sup>10</sup> Indian country" is defined under 18 U.S.C. 1151 as: (1) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation, (2) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. Under this definition, EPA treats as reservations trust lands validly set aside for the use of a Tribe even if the trust lands have not been formally designated as a reservation. In Idaho, Indian country includes, but is not limited to, the Coeur d'Alene Reservation, the Duck Valley Reservation, the Reservation of the Kootenai Tribe, the Fort Hall Indian Reservation, and the Nez Perce Reservation as described in the 1863 Nez Perce Treaty.

# VI. Statutory and Executive Order Reviews

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the rule neither imposes substantial direct compliance costs on tribal governments, nor preempts tribal law. Therefore, the requirements of section 5(b) and 5(c) of the Executive Order do not apply to this rule. Consistent with EPA policy, EPA nonetheless provided a consultation opportunity to Tribes in Idaho, Oregon and Washington in letters dated January 14, 2011. EPA received one request for consultation, and we have followed-up with that Tribe.

# List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Visibility, and Volatile organic compounds.

Dated: May 15, 2012 Michelle L. Pirzadeh,

Acting Regional Administrator,

Region 10.

[FR Doc. 2012-12411 Filed 05/21/2012 at 8:45 am; Publication Date: 05/22/2012]